



PATENT APPLICATION
Mo-5942
MD-00-46-PU

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION OF)
PETER H. MARKUSCH ET AL) GROUP NO.: 1711
SERIAL NUMBER: 09/808,812) EXAMINER: M. D. BISSETT
FILED: MARCH 15, 2001)
TITLE: TWO-PLY POLYURETHANE/GEOTEXTILE)
COMPOSITE AND PROCESS FOR)
PREPARING THE SAME)

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APPEAL BRIEF

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

The present Appeal Brief is submitted in triplicate in support of the Notice of Appeal filed May 28, 2003.

I. REAL PARTY IN INTEREST

The real party in interest for the present Application Serial No. 09/808,812 is Bayer Corporation, of Pittsburgh, Pennsylvania, by virtue of the assignment executed March 13, 2001.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an enveloped addressed to: Commissioner for Patents, Alexandria, VA 22313-1450 on 6/26/03

Date

John E. Mrozinski, Reg. No. 46,179

Name of applicant, assignee or Registered Representative

Signature

June 26, 2003

Date

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II. RELATED APPEALS AND INTERFERENCES

On May 28, 2003, a Notice of Appeal was filed in Application Serial No. 09/808,812. There are no pending appeals or interferences of which Appellants are aware that would be affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF THE CLAIMS

Appellants herewith appeal the final rejection of Claims 1-9. Claims 1-9, are pending and stand rejected. Claims 10 and 11 have been canceled. Claims 12-27 were withdrawn in response to a restriction requirement made by the Examiner. A complete copy of the appealed claims is set forth in the Appendix.

IV. STATUS OF AMENDMENTS AFTER FINAL

An Amendment under 37 CFR § 1.116 was filed on March 25, 2003. In the Advisory Action mailed April 14, 2003, the Examiner indicated that the amendment would be entered, but that it did not place the claims in condition for allowance because,

the Examiner will maintain the rejections based on 35 USC 102 and 35 USC 103. In response to the applicant's arguments that the Examiner's use of phrases including "points to", "similar" and "suggesting" do not suggest the anticipation of the claim, it is the Examiner's position that, in this case, the Examiner has used "points to" and "suggesting" to point out specific passages in the reference that teach the claimed limitations. One of ordinary skill in the art, upon reading Gasper, would recognize the reference as encompassing and teaching the claimed limitations. The Examiner points to "similar" materials used in the art to show further similarities in the geotextile materials of the art and the claimed invention. Note that specific geotextile materials are not claimed. The Examiner has pointed to passages in the reference to support anticipation of the claims. In response to the applicant's argument that the claims specify the use of two layers of different materials instead of multiple layers of the same material, it is noted that the claims, as written, do not specify different materials. The reference uses materials which are dimensionally stable (support layers) and also flexible, thus meeting the limitations of either or both claimed layers. The Examiner withdraws the argument

that it has been held obvious to use multiple layers of the same material, since the case law is not at hand. However, the Examiner maintains the motivation presented in the rejection of Adam et al. in view of Payne. One of ordinary skill in the art would recognize the conventionality of using two blanket layers, taught in the secondary reference Payne, and would be motivated by the expectancy of forming a ditch liner of equally improved cure processibility. The examiner also maintains the motivation for the rejection of Payne in view of Adam et al., where it would have been prima facie obvious to use Adam's polyurethane compositions in Payne's invention to provide liquid adhesive materials having improved cure processibility.

V. SUMMARY OF THE INVENTION

The present invention relates to a two-ply polyurethane geotextile composite in which a dimensionally stable geotextile is bonded to a pliable geotextile with a solidifiable liquid polyurethane composition which is a reaction product of a mixture comprising, a) a liquid polyisocyanate having an isocyanate content of at least 10% by weight, b) an isocyanate reactive component comprising a polyether polyol having from 2 to 6 hydroxyl groups and a number average molecular weight of from 250 to 8,000 and 0 to 10% by weight, based on total weight of b), of a low molecular weight diol or triol having an equivalent weight of from 31 to 99, c) a urethane catalyst, and optionally, d) a filler.

VI. ISSUES ON APPEAL

The following issues are set forth for consideration by the Board:

1. Whether Claims 1, 2, 5 and 6 are anticipated under 35 U.S.C. §102(b), by U.S. Pat. No. 4,968,542 issued to Gasper et al., as evidenced by U.S. Pat. No. 5,464,919 issued to Sinclair and U.S. Pat. No. 5,674,565 issued to Kausch et al.
2. Whether Claims 1-8 are unpatentable under 35 U.S.C. §103(a) over U.S. Pat. No. 4,872,784 issued to Payne, in view of U.S. Pat. No. 5,421,677 issued to Adam et al. and vice versa.
3. Whether Claim 9 is unpatentable under 35 U.S.C. §103(a) over U.S. Pat. No. 4,872,784 issued to Payne, in view of U.S. Pat. No. 5,421,677 issued to

Adam et al. and vice versa and further in view of U.S. Pat. No. 4,582,750 issued to Lou et al.

VII. GROUPING OF THE CLAIMS

With respect to the above Issue 1, Appellants admit that Claims 1, 2, 5 and 6 stand or fall together.

With respect to the above Issue 2, Appellants admit that Claims 1-8 stand or fall together.

With respect to the above Issue 3, Appellants admit that Claim 9 stands or falls alone.

VIII. ARGUMENT

As will be set forth in detail below, Claims 1, 2, 5 and 6 are not anticipated by U.S. Pat. No. 4,968,542 issued to Gasper et al., as evidenced by U.S. Pat. No. 5,464,919 issued to Sinclair and U.S. Pat. No. 5,674,565 issued to Kausch et al. Further, Claims 1-8 are not rendered obvious by U.S. Pat. No. 4,872,784 issued to Payne, in view of U.S. Pat. No. 5,421,677 issued to Adam et al. and vice versa. And, finally, Claim 9 is not rendered obvious by U.S. Pat. No. 5,421,677 issued to Adam et al. and vice versa and further in view of U.S. Pat. No. 4,582,750 issued to Lou et al. Accordingly the rejections under 35 U.S.C. § 102 and 103, should be reversed, and favorable action by the Board is respectfully requested.

A. The Invention

The present invention relates to a two-ply polyurethane geotextile composite in which a dimensionally stable geotextile is bonded to a pliable geotextile with a solidifiable liquid polyurethane composition which is a reaction product of a mixture comprising, a) a liquid polyisocyanate having an isocyanate content of at least 10% by weight, b) an isocyanate reactive component comprising a polyether polyol having from 2 to 6 hydroxyl groups and a number average molecular weight of from 250 to 8,000 and 0 to 10% by weight, based on total weight of b), of a low molecular weight diol or triol having an equivalent weight of from 31 to 99, c) a urethane catalyst, and optionally, d) a filler.

B. The Rejection Under U.S.C. § 102 is Improper

Claims 1, 2, 5 and 6 have been rejected under 35 U.S.C. § 102, as being anticipated by U.S. Pat. No. 4,968,542 issued to Gasper et al., as evidenced by U.S. Pat. No. 5,464,919 issued to Sinclair and U.S. Pat. No. 5,674,565 issued to Kausch et al. As will be set forth below, Appellants submit that Claim 1, and Claims 2, 5 and 6 dependent directly or indirectly thereupon are not anticipated and the rejection should be reversed.

1. The Examiner's Rationale

The Examiner has alleged at pages 2-3 of the final Office Action, mailed February 24, 2003, that

Gaspar discloses a flexible sheet material impregnated with a liquid polyurethane resin (abstract). The sheet is wrapped around a padding or itself, forming multiple layers of support material and padding material (col. 5 lines 8-36). The support can be formed from materials comprising fibers such as polyester, polyolefin, fiberglass, etc. (col. 4 lines 26-40) and is flexible. Since the material is formed from similar materials as those of the applicant's invention, and since the materials are describes (sic) as supportive, it is the Examiner's position that the materials have an amount of both rigid and flexible character. Thus, multi-layered impregnated materials would form a composite having a

rigid geotextile bonded to a soft, pliable geotextile. The polyurethane resin used to impregnate the material includes an isocyanate and active hydrogen compound, where diphenylmethane diisocyanates are preferred isocyanates (col. 2 lines 46-58). A preferred isocyanate, Isonate 143L, is a diphenylmethane diisocyanate having an NCO content of 29.2% (about 30%) and a viscosity of 33 cps (33 mPa·s) (Sinclair, col. 3 lines 19-26). Preferred polyols include polypropylene oxide polyols such as PPG 425 (col. 3 lines 16-27), a polypropylene ether diol having a molecular weight of 400 (Kausch et al., col. 7 lines 64-65). Catalysts are also included in the polyurethane compositions (col. 4 lines 9-17). Note that at least example 1 does not mention the use of fillers or low-molecular-weight diols or triols.

2. *The Claimed Compositions are Patentably Distinguishable From the Cited Reference*

In the above reproduced passage, the Examiner alleges that,

Gaspar discloses a flexible sheet material impregnated with a liquid polyurethane resin (abstract).

Gaspar et al. actually discloses an orthopedic support as can be seen from the abstract thereof reproduced below,

A curable orthopedic support material is disclosed comprising a flexible sheet material impregnated with a liquid resin system which cures upon exposure to a curing agent to a resilient, semi-rigid support device. The cured support is especially designed for orthopedic applications where conventional rigid casts are not desirable and/or necessary.

In the above reproduced passage, the Examiner also alleged that,

Since the material is formed from similar materials as those of the applicant's invention, and since the materials are describes (sic) as supportive, it is the examiner's position that the materials have an amount of both rigid and flexible character. Thus, multi-layered impregnated materials would form a composite having a rigid geotextile bonded to a soft, pliable geotextile.

Appellants disagree with this statement by the Examiner. Appellants fail to appreciate the logical leap from the Examiner's statement that the identical layered

materials of Gasper et al. have both rigid and flexible character to her statement that appears to argue that such materials when placed together would somehow be magically transformed; some into a rigid geotextile and others into a soft, pliable geotextile.

In the Advisory Action mailed April 14, 2003, the Examiner asserted that, "... specific geotextile materials are not claimed." Appellants disagree. The instantly claimed invention is directed to two different geotextiles, a dimensionally stable geotextile and a pliable geotextile.

Appellants direct the Board's attention to the top of page 17 of the instant specification, wherein examples of each of the claimed types of geotextiles have been provided. Geotextile A, TYPAR 3301, is an example of the claimed dimensionally stable geotextile, having a trapezoidal tear strength and a puncture strength of 35 lbs. and 25 lbs., respectively. Submitted herewith as Exhibit A for further substantiation of these parameters is a copy of a product pamphlet describing TYPAR geotextiles. Appellants respectfully direct the Board's attention to the table at the top of page 5 of that pamphlet, entitled "TYPAR English Properties".

Appellants again direct the Board's attention to page 17 of the instant specification. Geotextiles B and C are examples of the claimed pliable geotextiles. Geotextile B is FX-40HS, which has a tear strength of 50 lbs. and a puncture strength of 65 lbs. FX-40HS is described in a series of web pages, from the manufacturer Carthage Mills' web site, submitted herewith as Exhibit B. The Board's attention in this regard is directed to page 3 of that series.

Geotextile C is TREVIRA 1620, and has a tear strength of 50 lbs. and a puncture strength of 70 lbs. TREVIRA 1620 is described in page from the supplier Fluid Systems submitted herewith as Exhibit C.

Appellants note that the tear strengths for all three geotextiles were determined by ASTM D-4533 and the puncture strengths were determined by ASTM D-4833. The above-detailed information from the instant specification is summarized in the table below for the Board's convenience.

	TYPAR 3301	FX-40HS	TREVIRA 1620
Geotextile type	Dimensionally stable	pliable	pliable
Tear strength (lbs.)	35	50	50
Puncture strength (lbs.)	25	65	70
Fabric weight oz/yd ²	3.0	4.0	5.7

As can be appreciated by reference to the above table, dimensionally stable geotextiles have a lower tear strength and puncture strength, i.e., those geotextiles are less likely to stretch and more likely to tear or puncture. In contrast, pliable geotextiles are, as the name suggests, more likely to stretch as can be seen from the higher values for both tear and puncture strengths.

At page 4, paragraph 11 of the final Office Action, mailed February 24, 2003, in reply to Appellants' arguments in the prior Response, the Examiner stated,

"... it is noted that Gasper **points to** the use of woven or knit fabrics comprised of natural or synthetic fibers, where Gasper **mentions materials similar** to those employed in the instant specification. The polyurethane impregnates the fabrics, **suggesting** porosity." (Emphasis added).

The Examiner at page 6, paragraph 16, of that same Office Action, admitted that,

...the material is formed from **similar** material as those of the applicant's (sic) invention.... (emphasis added)

Appellants maintain that "points to", mentioning "similar" materials and "suggesting" characteristics are not the standards for a rejection under 35 U.S.C. §102(b) and respectfully remind the Board that to anticipate a claim, a reference must teach every element of that claim.

"The identical invention must be shown in as complete detail as is contained in the ...claim."

Richardson v. Suzuki Motor Co., 868 F.2d 1226,1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). (Emphasis added). Appellants respectfully contend that the Examiner has failed to point to where Gasper et al. fulfills this identity requirement.

Gaspar fails to disclose a geotextile as part of his orthopedic support. Further, Appellants contend that Sinclair and Kausch et al. fail to provide evidence of such.

Therefore, Claims 1, 2, 5 and 6 are not anticipated by U.S. Pat. No. 4,968,542 issued to Gaspar et al., as evidenced by U.S. Pat. No. 5,464,919 issued to Sinclair and U.S. Pat. No. 5,674,565 issued to Kausch et al. and the rejection thereof under 35 U.S.C. § 102 should be reversed.

C. The Rejection of Claims 1-8 Under U.S.C. § 103 is Improper

Claims 1-8 have been rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Pat. No. 4,872,784 issued to Payne, in view of U.S. Pat. No. 5,421,677 issued to Adam et al. and vice versa. As will be set forth below, Appellants submit that Claim 1, and Claims 2-8, dependent directly or indirectly upon Claim 1, are not rendered obvious by the cited combination of art and the rejection should be reversed.

1. The Examiner's Rationale

The Examiner has alleged at pages 3-4 of the final Office Action, mailed February 24, 2003, that

19. Payne discloses ditch lining materials formed by impregnating a solidifiable liquid mixture into a porous blanket (abstract). Support blanket materials include woven and non-woven materials made from fibers, yarns, and ribbons (col. 3 lines 38-48). The reference also teaches liners having a second blanket bonded by the liquid mixture onto the support blanket (col. 6, lines 4-19). Since the blanket materials are described as support materials and are shown as flexible materials (Figures 1-2), it is the examiner's position that the blanket materials of the invention would inherently possess both rigid and flexible character. Thus, a composite having two blanket sheets would anticipate a rigid geotextile bonded to a pliable textile. Payne suggests polyurethane materials as liquid mixtures (col. 5 lines 55-58). However, Payne does not disclose the applicant's claimed specific polyurethane composition.

20. Adam discloses ditch liners made by impregnating a solidifiable liquid mixture into a porous blanket, where the solidifiable material is a the reaction mixture of a polyisocyanate, a catalyst, a propylene oxide adduct of an alkanolamine, a propylene oxide adduct of a low molecular weight polyol, and a propylene oxide adduct of a low molecular weight diol (abstract). The example shows the combination of a polymethylene poly(phenyl isocyanate) having an NCO content of 31.6% by weight and a viscosity of 200 mPa·s, 10 parts of a propylene oxide/monoethanolamine adduct having a molecular weight of 480, a propylene oxide adduct of glycerin having a molecular weight of 2000. Organic tin catalysts are used in the invention (col. 4 lines 36-43). The polyurethane mixtures of the invention cure in a reasonable amount of time without externally applied heat (col. 2 lines 22-25). Therefore, it is the examiner's position that it would have been prima facie obvious to use Adam's polyurethane compositions in Payne's inventions to provide liquid adhesive materials having improved cure processibility.

21. Likewise, Adam applies as above for a ditch liner comprising a porous blanket and solidifiable polyurethane liquid mixture. The reference refers to Payne (USPN 4,872,784) for liner-forming process and apparatus (example, col. 2 lines 26-30). However, Adam does not suggest the use of an additional blanket layer. Payne suggests the use of such a second blanket layer, also demonstrating the structure (col. 6 lines 7-13, Figures 2, 5) as a preferred embodiment of the invention. Thus, it is the examiner's position that it would have been prima facie obvious to include a second blanket layer in Adam's invention to form a ditch liner having equally improved cure processibility.

22. Payne and Adam apply as above, failing to mention the thickness of the blanket layers. However, since the object of both inventions is to form ditch liners with improved cost and durability, it is the examiner's position that it would have been prima facie obvious to choose the blanket layers of any thickness necessary to optimize durability and cost.

2. *The Claimed Compositions are Patentably Distinguishable From the Cited Combination of References*

Appellants respectfully remind the Board of the Federal Circuit's admonition given in *In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1458-9 (Fed. Cir. 1998) that,

To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the examiner to show a motivation to combine the references that create the case of obviousness. In other words, the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.

Appellants respectfully contend that the Examiner has failed to show such reasons in the Office Actions in this case. At page 5, paragraph 12, of the final Office Action mailed February 24, 2003, the Examiner alleged that,

"...Payne indicates the preferred use of two blanket layers, where the use of two blanket layers would provide at least equal durability compared to an apparatus using one blanket layer."

Instant Example 1 demonstrates the use of two identical blanket layers as the Examiner contends is called for by Payne. A comparison of the physical properties of that example with the inventive Examples 2 and 3 clearly shows the superiority of the claimed invention, which uses two different geotextiles.

Appellants aver that the instant claims are directed to a two-ply polyurethane geotextile composite in which **a dimensionally stable geotextile** is bonded to **a pliable geotextile** and contend that Payne fails to disclose or suggest the instantly claimed composite. The different characteristics of each of the geotextiles was demonstrated above in section B, and in the interest of brevity will not be reproduced here. Adam et al. fails to disclose or suggest using more than one layer as admitted by the Examiner at page 8, paragraph 21, of the first Office Action, mailed September 9, 2002.

Thus, the cited combination of references fails to render obvious Claim 1 and those dependent thereupon, namely Claims 2-8, and therefore the rejections thereof under 35 U.S.C. § 103 should be reversed.

D. The Rejection of Claim 9 Under U.S.C. § 103 is Improper

Claims 9 has been rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Pat. No. 5,421,677 issued to Adam et al. and vice versa and further in view of U.S. Pat. No. 4,582,750 issued to Lou et al. As will be set forth below, Appellants submit that Claim 9 is not rendered obvious by the cited combination of art and the rejection thereof should be reversed.

1. The Examiner's Rationale

The Examiner has alleged at page 4 of the final Office Action, mailed February 24, 2003, that

24. Payne and Adam et al. apply as above, failing to mention the second blanket layer as having a burnished side. Lou teaches that fabrics made from synthetic organic fibers can be burnished (col. 1 line 56-col. 2 line 1), where the burnishing step serves to provide an abrasion-resistant, uniform-appearing surface (col. 4 lines 11-14). Since durability is mentioned in both Payne and Adam as a quality to be improved, it is the examiner's position that it would have been prima facie obvious to use a porous blanket having at least one burnished side to improve abrasion-resistance and thus improve durability of the composites.

2. The Claimed Compositions are Patentably Distinguishable From the Cited Combination of References

Appellants' comments with respect to Payne in view of Adam et al. and vice versa with respect to the above rejection are equally applicable to the instant rejection. Neither Payne nor Adam et al. alone or in combination disclose or suggest the instantly claimed invention. Further, Lou et al. fails to add the missing teaching or suggestion that would lead one of ordinary skill in the art to the instantly claimed invention. Lou et al. teach burnishing a synthetic fabric to improve abrasion resistance. The Examiner has failed to point to where the cited art would motivate

one of ordinary skill in the art to combine Lou et al. therewith to arrive at the instantly claimed invention.

The Examiner states in the above-reproduced passage that both Payne and Adam et al. have as their object the improvement of durability. Appellants agree. However, Appellants aver that the Examiner has not demonstrated the insufficiency of Payne or Adam et al. which would motivate one of ordinary skill to look to other ways of improving durability, such as providing a geotextile with at least one burnished side as is instantly claimed. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). (MPEP 2143.01)

Thus, the cited combination of references fails to render obvious Claim 9 and therefore the rejection thereof under 35 U.S.C. § 103 should be reversed.

IX. Conclusions

Therefore, Claims 1, 2, 5 and 6 are not anticipated by U.S. Pat. No. 4,968,542 issued to Gasper et al., as evidenced by U.S. Pat. No. 5,464,919 issued to Sinclair and U.S. Pat. No. 5,674,565 issued to Kausch et al. and the rejection thereof under 35 U.S.C. § 102 should be reversed. The Examiner has failed to provide support for the logical leap from her contention that the identical layered materials of the orthopedic support of Gasper et al. have both rigid and flexible character to her statement appearing to argue that such materials when placed together would be somehow magically transformed; some into a rigid geotextile and others into a soft, pliable geotextile.

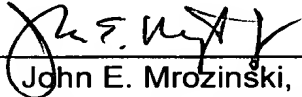
Further, Claims 1-8 are not rendered obvious by U.S. Pat. No. 4,872,784 issued to Payne, in view of U.S. Pat. No. 5,421,677 issued to Adam et al. and vice versa and the rejections thereof under 35 U.S.C. § 103 should be reversed. Instant Example 1 demonstrates the use of two identical blanket layers, as the Examiner contends is called for by Payne. A comparison of the physical properties of that

Example 1 with the inventive Examples 2 and 3 clearly shows the superiority of the claimed invention, which uses two different geotextiles.

Finally, Claims 9 is not rendered obvious by U.S. Pat. No. 5,421,677 issued to Adam et al. and vice versa and further in view of U.S. Pat. No. 4,582,750 issued to Lou et al. and the rejection thereof under 35 U.S.C. § 103 should be reversed. The Examiner has failed to demonstrate the insufficiency of Payne or Adam et al. which would motivate one of ordinary skill to look to other ways of improving durability, such as providing a geotextile with at least one burnished side as is instantly claimed.

Thus, the rejections of Claims 1-9 under 35 U.S.C. §§102 and 103 are erroneous and the Board's reversal of those rejections is respectfully requested.

Respectfully submitted,

By 
John E. Mrozinski, Jr.
Attorney for Appellants
Reg. No. 46,179

Bayer Polymers LLC
100 Bayer Road
Pittsburgh, Pennsylvania 15205-9741
(412) 777-3024
FACSIMILE PHONE NUMBER:
(412) 777-3902
lo/MROZINSKI/jem052

APPENDIX – CLAIMS ON APPEAL

Claim 1. A two-ply polyurethane geotextile composite in which a dimensionally stable geotextile is bonded to a pliable geotextile with a solidifiable liquid polyurethane composition which is a reaction product of a mixture comprising:

- a) a liquid polyisocyanate having an isocyanate content of at least 10% by weight,
- b) an isocyanate reactive component comprising a polyether polyol having from 2 to 6 hydroxyl groups and a number average molecular weight of from 250 to 8,000 and 0 to 10% by weight, based on total weight of b), of a low molecular weight diol or triol having an equivalent weight of from 31 to 99,
- c) a urethane catalyst, and optionally,
- d) a filler.

Claim 2. The composite of Claim 1, wherein the polyether polyol b) comprises a polyoxypolypropylene polyether having a number average molecular weight of from about 400 to about 4,000 and an average functionality of 2 to 3.

Claim 3. The composite of Claim 1, wherein the polyether polyol b) comprises:

- (i) from about 5 to about 15 parts by weight of a propylene oxide adduct of an alkanolamine which adduct has a number average molecular weight of from 250 to about 1000,
- (ii) a propylene oxide adduct of a low molecular weight organic compound having from about 3 to about 6 OH groups which adduct has a number average molecular weight of from 250 to 1000, and
- (iii) a propylene oxide adduct of a low molecular weight diol which adduct has a number average molecular weight of from 250 to about 3000.

Claim 4. The composite of Claim 1, wherein the catalyst c) comprises an organic tin compound.

Claim 5. The composite of Claim 1, wherein the liquid polyisocyanate a) is an aromatic polyisocyanate.

Claim 6. The composite of Claim 1, wherein the liquid polyisocyanate a) is a polymethylene poly(phenylisocyanate) having an NCO-content of about 30 to 33% and a viscosity of about 20 mPa·s to 2,000 mPa·s at 25°C.

Claim 7. The composite of Claim 1, wherein the dimensionally stable geotextile has a maximum thickness of 1 mm.

Claim 8. The composite of Claim 1, wherein the pliable geotextile has a minimum thickness of 1 mm.

Claim 9. The composite of Claim 1, wherein the pliable geotextile has at least one side burnished.